

09/187,262  
**WEST Search History**

DATE: Monday, September 08, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT,PGPB,JPAB,EPAB; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>			
L11	L9 or L10	100	L11
L10	L6 and L8	100	L10
L9	L7 and L8	25	L9
L8	solid solution	31598	L8
L7	L1 and L2 same L3 same L4 and L5	406	L7
L6	L1 and L2 and L3 and L4 and L5	1750	L6
L5	pore volume	18019	L5
L4	carrier or support or substrate	2857039	L4
L3	composite	389161	L3
L2	oxide near3 (powder or metal)	198193	L2
L1	catalyst or catalytic or initiator or initiation	630757	L1

END OF SEARCH HISTORY

09/987,262

L Number	Hits	Search Text	DB	Time stamp
1	3	"2000347952"	JP ; DERWENT	2003/09/08 16:25
2	2	JP-2002211908-\$.did.	JPO; DERWENT	2003/09/08 16:32
3	14	"6335305" "5397758" "5993762"	USPAT; US-PGPUB	2003/09/08 16:41
5	1	EP-1206965\$	JPO; DERWENT	2003/09/08 16:32
4	11	("6335305" "5397758" "5993762") and (Oxide with (metal or powder))	USPAT; US-PGPUB	2003/09/08 16:36
7	11	("6335305" "5397758" "5993762") and (Oxide with (metal or powder))) and (cataly\$4 or initiator)	USPAT; US-PGPUB	2003/09/08 16:37
8	3	("6335305" "5397758" "5993762").pn.	USPAT; US-PGPUB	2003/09/08 16:41
9	2	ep-1020216\$	EPO; DERWENT	2003/09/08 16:49
10	4	ep-0834348\$ or ep-1040870\$ or ep-1175939\$	EPO; DERWENT	2003/09/08 16:49

9/8/03

## Problem Analysis and Search Strategy Worksheet

Case Number- <u>09/987,262</u>		Filing Date- Assignee	
Applicants			
Related US and foreign applications/docs		Publications applicant cited	
US Classes and subclasses		International classification	
Concept A Catalyst or catalytic or initiator or initiation	Concept B OXIDE NEAR3 (Powder or metal)	Concept C COMPOSITE	Concept D Growth or pore volume
Synonyms Carrier or Substrate or Support	Synonyms L1 & L2 & L3 & L4 or L5	Synonyms L1 & L2 & L3 or L4 & L5	Synonyms
Databases			
C mmands, syntax, search statements for each database			

applicant ECLA  
Priority Doc.

DERWENT-ACC-NO: 2002-464839

DERWENT-WEEK: 200265

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TITLE: Composite oxide powder for catalyst  
for hydrogen generation and exhaust gas  
purification, comprises particles of composite oxides of two  
different metal oxides

INVENTOR: HATANAKA, M; MORIKAWA, A ; SOBUKAWA, H ; SUDA, A  
; YAMAZAKI, K

PATENT-ASSIGNEE: TOYOTA CHUO KENKYUSHO KK[TOYW]

PRIORITY-DATA: 2001JP-0336643 (November 1, 2001) ,  
2000JP-0347952 (November 15,  
2000)

PATENT-FAMILY:

PUB-NO	PAGES	PUB-DATE	MAIN-IPC	
JP 2002211908 A		July 31, 2002		N/A
017	C01B	013/36		
EP 1206965 A1		May 22, 2002		E
034	B01J	023/10		
US 20020090512 A1		July 11, 2002		N/A
000	B32B	009/00		

DESIGNATED-STATES: AL AT BE CH CY DE DK ES FI FR GB GR IE  
IT LI LT LU LV MC MK  
NL PT RO SE SI TR

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
JP2002211908A	N/A	
2001JP-0336643	November 1, 2001	
EP 1206965A1	N/A	
2001EP-0127034	November 14, 2001	

US20020090512A1  
2001US-0987262

N/A  
November 14, 2001

INT-CL (IPC): B01D053/86, B01D053/94 , B01J023/00 ,  
B01J023/10 ,  
B01J023/63 , B01J032/00 , B01J035/10 , B01J037/03 ,  
B32B009/00 ,  
C01B013/36 , C01B025/00 , C01B033/00 , C01F017/00 ,  
C01G023/00

ABSTRACTED-PUB-NO: EP 1206965A

BASIC-ABSTRACT:

NOVELTY - A composite oxide powder comprises particles of composite oxide containing oxide of metal (M1) and oxide of metal (M2). M2 does not dissolve in M1, and M1 and M2 are dispersed at nanometer level.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

- (1) Production of composite oxide powder which involves preparing an aqueous solution or water-contained solution of a chemical compound of M1 and a chemical compound of a M2; precipitating oxide of M1 or its precursor and oxide of M2 or its precursor or a chemical compound of oxides or precursors of above aqueous solution; and calcining obtained precipitate; and
- (2) Catalyst which comprises a catalyst support containing composite oxide powder, and a noble metal loaded on it.

USE - Used as catalyst support for catalysts used for hydrogen generation and exhaust gas purification.

ADVANTAGE - The composite oxide powder has large specific surface area, even after exposed to high temperature for prolonged time, without losing characteristics of oxide of single metal. The catalyst

formed from the composite oxide powder has excellent durability by suppressing noble metal grain growth, during the use at high temperature for a long time. The composite oxide powder has large meso-pore volume even after high temperature durability test. Therefore, the catalyst comprising composite oxide powder exhibits high catalytic activity, because the highly dispersed state of noble metal can be maintained even after high temperature durability test. The catalyst comprising noble metal-loaded cerium oxide, maintains high carbon monoxide conversion efficiency at low temperature, and also maintains high hydrocarbon conversion activity and hydrogen generation activity by water gas shift reaction, even after high temperature endurance test.

DESCRIPTION OF DRAWING(S) - The figure shows elemental analysis on one of non-overlapped particles of composite oxide powder, prepared in example, by EDS using FE-STEM with a beam of 0.5 nm diameter.

ABSTRACTED-PUB-NO: US20020090512A

#### EQUIVALENT-ABSTRACTS:

NOVELTY - A composite oxide powder comprises particles of composite oxide containing oxide of metal (M1) and oxide of metal (M2). M2 does not dissolve in M1, and M1 and M2 are dispersed at nanometer level.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are included for the following:

(1) Production of composite oxide powder which involves preparing an aqueous solution or water-contained solution of a chemical compound of M1 and a chemical compound of a M2; precipitating oxide of M1 or its precursor and oxide of M2 or its precursor or a chemical compound of oxides or

precursors of above  
aqueous solution; and calcining obtained precipitate; and

(2) Catalyst which comprises a catalyst support containing  
composite oxide  
powder, and a noble metal loaded on it.

USE - Used as catalyst support for catalysts used for  
hydrogen generation and  
exhaust gas purification.

ADVANTAGE - The composite oxide powder has large specific  
surface area, even  
after exposed to high temperature for prolonged time,  
without losing  
characteristics of oxide of single metal. The catalyst  
formed from the  
composite oxide powder has excellent durability by  
suppressing noble metal  
grain growth, during the use at high temperature for a long  
time. The  
composite oxide powder has large meso-pore volume even  
after high temperature  
durability test. Therefore, the catalyst comprising  
composite oxide powder  
exhibits high catalytic activity, because the highly  
dispersed state of noble  
metal can be maintained even after high temperature  
durability test. The  
catalyst comprising noble metal-loaded cerium oxide,  
maintains high carbon  
monoxide conversion efficiency at low temperature, and also  
maintains high  
hydrocarbon conversion activity and hydrogen generation  
activity by water gas  
shift reaction, even after high temperature endurance test.

DESCRIPTION OF DRAWING(S) - The figure shows elemental  
analysis on one of  
non-overlapped particles of composite oxide powder,  
prepared in example, by EDS  
using FE-STEM with a beam of 0.5 nm diameter.

CHOSEN-DRAWING: Dwg.1/15

TITLE-TERMS: COMPOSITE OXIDE POWDER CATALYST HYDROGEN  
GENERATE EXHAUST GAS

PURIFICATION COMPRISE PARTICLE COMPOSITE TWO  
METAL

DERWENT-CLASS: E36 H06 J04

CPI-CODES: E11-Q02; H06-C03; J04-E04; N01-A; N01-C02;  
N01-D02; N02-F02;  
N03-B01; N03-B02; N06-E01; N06-F; N07-B;  
N07-L01C1;

CHEMICAL-CODES:

Chemical Indexing M3 \*01\*

Fragmentation Code

A155 A940 C108 C550 C730 C801 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 N513 N514 N515 N522  
Q413 Q421 Q431 Q436 Q439 Q622 R036

Specfic Compounds

A00TAK A00TAM A00TAP

Chemical Indexing M3 \*02\*

Fragmentation Code

A155 A940 C108 C550 C730 C801 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 M910 N513 N514 N515  
N522 Q413 Q421 Q431 Q436 Q439 Q622 R036

Specfic Compounds

02015K 02015M 02015P

Registry Numbers

2015P 2015U

Chemical Indexing M3 \*03\*

Fragmentation Code

A313 A940 C108 C550 C730 C801 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 M910 N513 N514 N515  
N522 Q413 Q421 Q431 Q436 Q439 Q622 R036

Specfic Compounds

01544K 01544M 01544P

Registry Numbers

1544P 1544U

Chemical Indexing M3 \*04\*

Fragmentation Code

A422 A940 C108 C550 C730 C801 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 M910 N513 N514 N515  
N522 Q413 Q421 Q431 Q436 Q439 Q622 R036

Specfic Compounds

01966K 01966M 01966P

Registry Numbers



1966P 1966U

Chemical Indexing M3 \*05\*

Fragmentation Code

A422 A940 C108 C550 C730 C801 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 M910 N513 N514 N515  
N522 Q413 Q421 Q431 Q436 Q439 Q622 R036

Specific Compounds

13426K 13426M 13426P

Registry Numbers

1966P 1966U

Chemical Indexing M3 \*06\*

Fragmentation Code

A422 A940 C108 C550 C730 C801 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 N513 N514 N515 N522  
Q413 Q421 Q431 Q436 Q439 Q622 R036

Specific Compounds

03536K 03536M 03536P

Chemical Indexing M3 \*07\*

Fragmentation Code

B114 B701 B720 B831 C108 C800 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 N513 N514 N515 N522  
Q413 Q421 Q431 Q436 Q439 Q622 R036

Specific Compounds

08794K 08794M 08794P

Chemical Indexing M3 \*08\*

Fragmentation Code

B114 B702 B720 B831 C108 C800 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 N513 N514 N515 N522  
Q413 Q421 Q431 Q436 Q439 Q622 R036

Specific Compounds

01694K 01694M 01694P

Registry Numbers

1694P 1694U

Chemical Indexing M3 \*09\*

Fragmentation Code

M720 M782 M905 N513 N514 N515 N522 Q413 Q421 Q431  
Q436 Q439 Q622 R036

Specific Compounds

A00R2K A00R2M A00R2P

Chemical Indexing M3 \*10\*

Fragmentation Code

A540 A940 C108 C550 C730 C801 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 N513 N514 N515 N522  
Q413 Q421 Q431 Q436 Q439 Q622 R036  
Specific Compounds  
A0ARCK A0ARCM A0ARCP

Chemical Indexing M3 \*11\*

Fragmentation Code  
A540 A940 C108 C550 C730 C801 C802 C803 C804 C805  
C807 M411 M720 M782 M904 M905 M910 N513 N514 N515  
N522 Q413 Q421 Q431 Q436 Q439 Q622 R036  
Specific Compounds  
01521K 01521M 01521P A2VTEK A2VTEM A2VTEP  
Registry Numbers  
1521P 1521U

Chemical Indexing M3 \*12\*

Fragmentation Code  
A678 C810 M411 M720 M782 M904 M905 N513 N514 N515  
N522 Q413 Q421 Q431 Q436 Q439 Q622 R036  
Specific Compounds  
03247K 03247M 03247P

Chemical Indexing M3 \*13\*

Fragmentation Code  
A758 A940 C108 C307 C510 C730 C801 C802 C803 C804  
C807 M411 M730 M904 M905  
Specific Compounds  
11544K 11544S

Chemical Indexing M3 \*14\*

Fragmentation Code  
A313 A940 C108 C307 C510 C730 C801 C802 C803 C804  
C807 M411 M730 M904 M905 M910  
Specific Compounds  
01967K 01967S  
Registry Numbers  
1967S 1967U

Chemical Indexing M3 \*15\*

Fragmentation Code  
C101 C550 C810 M411 M720 M781 M904 M905 N163 N442  
Q431 Q436 Q439 Q508 Q509 R013  
Specific Compounds  
01532K 01532P 01532U  
Registry Numbers  
1532P 1532U

Chemical Indexing M3 \*16\*

Fragmentation Code

C107 C108 C520 C730 C800 C801 C802 C803 C804 C807

M411 M750 M904 M905 N163 Q431 Q436 Q439 R013

Specific Compounds

01901K 01901X

Registry Numbers

1901U

Chemical Indexing M3 \*17\*

Fragmentation Code

C108 C307 C520 C730 C800 C801 C802 C803 C804 C807

M411 M750 M904 M905 M910 N163 Q431 Q436 Q439 R013

Specific Compounds

01902K 01902X

Registry Numbers

1902U

Chemical Indexing M3 \*18\*

Fragmentation Code

C107 C108 C307 C520 C730 C800 C801 C802 C803 C804

C807 M411 M750 M904 M905 M910 N163 Q431 Q436 Q439

R013

Specific Compounds

01881K 01881X

Registry Numbers

1881U

UNLINKED-DERWENT-REGISTRY-NUMBERS: 1521P; 1521U ; 1532P ;  
1532U ; 1544P ; 1544U  
; 1694P ; 1694U ; 1881U ; 1901U ; 1902U ; 1966P ; 1966U ;  
1967S ; 1967U ; 2015P  
; 2015U

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2002-132382

Derwent Record

**DERWENT-ACC-N : 2002-293997**

**DERWENT-WEEK: 200354**

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**TITLE: Preparation of supported metal catalyst composition for production of vinyl acetate involves treating mobile metal, or precursor in support particles with liquid comprising reducing agent(s) to deposit and immobilize metal or its precursor**

**INVENTOR: BAKER, M J; COUVES, J W ; GRIFFIN, K G ;  
JOHNSTON, P ; MCNICOL, J C  
; SALEM, G F**

**PATENT-ASSIGNEE: BP CHEM LTD[BRPE] , JOHNSON MATTHEY PLC[JOHO]**

**PRIORITY-DATA: 2000US-0626156 (July 26, 2000) ,  
2003US-0338673 (January 9,  
2003)**

X

**PATENT-FAMILY:**

<b>PUB-NO</b>	<b>PUB-DATE</b>	<b>LANGUAGE</b>	<b>PAGES</b>
<b>MAIN-IPC</b>			
<b>US 20030144544 A1</b>	<b>July 31, 2003</b>	<b>N/A</b>	<b>000</b>
<b>C07C 067/05</b>			
<b>EP 1175939 A1</b>	<b>January 30, 2002</b>	<b>E</b>	<b>015</b>
<b>B01J 035/00</b>			
<b>CA 2353189 A1</b>	<b>January 26, 2002</b>	<b>E</b>	<b>000</b>
<b>B01J 037/02</b>			

<b>CN 1334144 A</b>	<b>February 6, 2002</b>	<b>N/A</b>	<b>000</b>
<b>B01J 037/02</b>			
<b>JP 2002045706 A</b>	<b>February 12, 2002</b>	<b>N/A</b>	<b>010</b>
<b>B01J 037/02</b>			
<b>BR 200103041 A</b>	<b>April 30, 2002</b>	<b>N/A</b>	<b>000</b>
<b>B01J 023/38</b>			
<b>KR 2002009518 A</b>	<b>February 1, 2002</b>	<b>N/A</b>	<b>000</b>
<b>B01J 033/00</b>			
<b>US 6534438 B1</b>	<b>March 18, 2003</b>	<b>N/A</b>	<b>000</b>
<b>B01J 023/00</b>			

**DESIGNATED-STATES: AL AT BE CH CY DE DK ES FI FR GB GR IE  
IT LI LT LU LV MC MK  
NL PT RO SE SI TR**

**APPLICATION-DATA:**

<b>PUB-NO</b>	<b>APPL-DESCRIPTOR</b>	<b>APPL-NO</b>	
<b>US20030144544A1</b>	<b>Div ex</b>	<b>2000US-0626156</b>	
<b>July 26, 2000</b>			
<b>US20030144544A1</b>	<b>N/A</b>	<b>2003US-0338673</b>	
<b>January 9, 2003</b>			
<b>US20030144544A1</b>	<b>Div ex</b>	<b>US 6534438</b>	<b>N/A</b>
<b>EP 1175939A1</b>	<b>N/A</b>	<b>2001EP-0305986</b>	<b>July</b>
<b>11, 2001</b>			
<b>CA 2353189A1</b>	<b>N/A</b>	<b>2001CA-2353189</b>	<b>July</b>
<b>17, 2001</b>			
<b>CN 1334144A</b>	<b>N/A</b>	<b>2001CN-0124364</b>	<b>July</b>
<b>26, 2001</b>			
<b>JP2002045706A</b>	<b>N/A</b>	<b>2001JP-0226864</b>	<b>July</b>
<b>26, 2001</b>			
<b>BR 200103041A</b>	<b>N/A</b>	<b>2001BR-0003041</b>	<b>July</b>
<b>26, 2001</b>			
<b>KR2002009518A</b>	<b>N/A</b>	<b>2001KR-0044926</b>	<b>July</b>

**25, 2001**

**US 6534438B1**

**N/A**

**2000US-0626156**

**July**

**26, 2000**

**INT-CL (IPC): B01J023/00, B01J023/02 , B01J023/38 ,  
B01J023/40 ,  
B01J023/42 , B01J023/44 , B01J023/58 , B01J023/66 ,  
B01J023/72 ,  
B01J033/00 , B01J035/00 , B01J035/08 , B01J037/02 ,  
B01J037/16 ,  
C07B061/00 , C07C067/05 , C07C067/055 , C07C069/01 ,  
C07C069/15**

**RELATED-ACC-NO: 2002-470561**

**ABSTRACTED-PUB-NO: EP 1175939A**

**BASIC-ABSTRACT:**

**NOVELTY - A supported metal catalyst composition is prepared by treating a mobile metal, or precursor in support particles with a liquid comprising reducing agent to deposit and immobilize the metal or its precursor in the support particles such that the metal, or its precursor, is distributed in the support particle in a layer below the surface of the support particle.**

**DETAILED DESCRIPTION - Preparation of supported metal catalyst composition comprises:**

**(1) impregnating microspherical support particles with a solution**

**f**  
**catalytically active metal or its precursor, such that the metal or its precursor, is in a mobile state in the support particles;**

**(2) drying the impregnated support particles; and**

**(3) treating the mobile metal, or precursor in the support particles with a liquid comprising the reducing agent to deposit and immobilize the metal or its precursor in the support particles such that the metal, or its precursor, is distributed in the support particle in a layer (2) below the support particle surface (3).**

**The layer is between an inner and an outer region (4, 5). Each of the inner and outer regions have a lower concentration of the metal or precursor than the layer.**

**An INDEPENDENT CLAIM is also included for a process for preparation of vinyl acetate comprising reacting ethylene and acetic acid with molecular oxygen containing gas with catalyst composition prepared by above process.**

**USE - For preparing a supported metal catalyst composition for fluid bed reactors for the production of vinyl acetate (claimed).**

**ADVANTAGE - The invention provides high attrition resistance as well as high**

activity. The outer region of the catalyst composition also provides resistance to poisoning of the catalytically active metal.

**DESCRIPTION OF DRAWING(S)** - The figure shows a cross-section of a catalyst particle.

**Layer 2**

**Particle surface 3**

**Inner and outer region 4, 5**

**Outer edge 7**

**CHOSEN-DRAWING: Dwg.1/2**

**TITLE-TERMS: PREPARATION SUPPORT METAL CATALYST  
COMPOSITION PRODUCE VINYL  
ACETATE TREAT MOBILE METAL PRECURSOR SUPPORT  
PARTICLE LIQUID  
COMPRISE REDUCE AGENT DEPOSIT IMMOBILISE METAL  
PRECURSOR**

**DERWENT-CLASS: A41 E17**

**CPI-CODES: A01-D10A; E10-G02D2; N02-D01; N02-E04; N02-F02;  
N03-A; N06-F;**

**CHEMICAL-CODES:**

**Chemical Indexing M3 \*01\***

**Fragmentation Code**

**A758 C810 M411 M720 M730 M904 M905 N412 N512 N513**

**Q422 R032 R033**

**Specific Compounds**



**19499K 19499C 19499P**

**Chemical Indexing M3 \*02\***

**Fragmentation Code**

**A429 C810 M411 M720 M730 M904 M905 N412 N512 N513**

**Q422 R032 R033**

**Specific Compounds**

**05099K 05099C 05099P**

**Chemical Indexing M3 \*03\***

**Fragmentation Code**

**A679 C810 M411 M720 M730 M904 M905 N412 N512 N513**

**Q421 R032 R033**

**Specific Compounds**

**03080K 03080C 03080P**

**Chemical Indexing M3 \*04\***

**Fragmentation Code**

**A546 C810 M411 M720 M730 M904 M905 N412 N512 N513**

**R032 R033**

**Specific Compounds**

**03031K 03031C 03031P**

**Chemical Indexing M3 \*05\***

**Fragmentation Code**

**B114 B702 B720 B831 C108 C800 C802 C803 C804 C805**

**C807 M411 M720 M730 M904 M905 N412 N512 N513 Q423**

**R032 R033**

**Specific Compounds**

**01694K 01694C 01694P**

**Registry Numbers**

**1694P 1694S 1694U**

**Chemical Indexing M3 \*06\***

**Fragmentation Code**

**H7 H713 H721 J0 J011 J2 J271 M210 M211 M212**

**M262 M272 M281 M320 M416 M720 M904 M905 M910 N221  
N262 N342 N411 N441 N512 N513 Q110**

**Specific C mp unds**

**00835K 00835P**

**Registry Numbers**

**0835P 0835U**

**Chemical Indexing M3 \*07\***

**Fragmentation Code**

**J4 J471 M280 M320 M416 M620 M781 M904 M905 M910  
Q509 R023**

**Specific Compounds**

**00001K 00001U**

**Registry Numbers**

**0001U**

**Chemical Indexing M3 \*08\***

**Fragmentation Code**

**C101 C107 C520 C730 C800 C801 C802 C804 C806 C807  
M411 M781 M904 M905 M910 Q509 R023**

**Specific Compounds**

**01208K 01208U 07206K 07206U**

**Registry Numbers**

**1208U**

**Chemical Indexing M3 \*09\***

**Fragmentation Code**

**A111 A940 B105 B720 B760 B809 B831 C101 C802 C804  
C805 C806 C807 M411 M781 M904 M905 M910 Q509 R023**

**Specific Compounds**

**01997K 01997U**

**Registry Numbers**

**1997U**

**Chemical Indexing M3 \*10\***

**Fragmentation Code**

**A111 A960 C710 J0 J011 J1 J171 M280 M320 M411  
M510 M520 M530 M540 M620 M630 M781 M904 M905 M910  
Q509 R023  
Specific Compounds  
01134K 01134U  
Registry Numbers  
1134U**

**Chemical Indexing M3 \*11\***

**Fragmentation Code**

**H4 H401 H481 H8 M210 M211 M212 M213 M214 M215  
M216 M220 M221 M222 M223 M224 M225 M226 M231 M232  
M233 M272 M281 M320 M416 M620 M781 M904 M905 Q509  
R023**

**Markush Compounds**

**200059-13501-K 200059-13501-U**

**Chemical Indexing M3 \*12\***

**Fragmentation Code**

**J0 J011 J1 J171 M210 M211 M262 M281 M320 M416  
M620 M730 M904 M905 M910**

**Specific Compounds**

**00247K 00247S 07345K 07345S**

**Registry Numbers**

**0247S 0247U**

**Chemical Indexing M3 \*13\***

**Fragmentation Code**

**H7 H721 M210 M212 M320 M416 M610 M730 M904 M905**

**Specific Compounds**

**00326K 00326S**

**Registry Numbers**

**0326S 0326U**

**Chemical Indexing M3 \*14\***

**Fragmentation Code**

**C108 C550 C810 M411 M730 M904 M905 M910 Q507**

**Sp cfic C mp unds**

**01779K 01779S**

**Registry Numbers**

**1779S 1779U**

**UNLINKED-DERWENT-REGISTRY-NUMBERS: 0001U; 0247S ;  
0247U ; 0326S ; 0326U ; 0835P  
; 0835U ; 1134U ; 1208U ; 1694P ; 1694S ; 1694U ; 1779S ; 1779U  
; 1997U**

**ENHANCED-POLYMER-INDEXING:**

**Polymer Index [1.1]**

**018 ; R00835 G0566 G0022 D01 D11 D10 D12 D51 D53 D58 D63  
D84 F41**

**F89 ; H0271 ; L9999 L2471 ; L9999 L2186\*R ; L9999 L2813**

**Polymer Index [1.2]**

**018 ; ND02 ; ND03**

**Polymer Index [1.3]**

**018 ; 8B\*R Tr Pd 8B ; C999 C000\*R ; C999 C259 ; C999 C248**

**Polymer Index [1.4]**

**018 ; C999 C168 ; C999 C259 ; S9999 S1456\*R ; B9999 B5209  
B5185**

**B4740**

**Polymer Index [1.5]**

**018 ; D00 D09 Au 1B Tr Cu Ce 9A 1A\*R 2A\*R 1B\*R 2B\*R 9A\*R  
Tr\*R ;**

**C999 C113\*R ; C999 C259**

**Polymer Index [1.6]**

**018 ; D01 D11 D10 D50 D61\*R D81 F36 F35 Na 1A ; R01208  
G2335 D00**

**F11 H\* N\* 5A ; R00001 G1503 D01 D50 D81 F22 ; R01997 D00  
H\* B\* 3A**

**Na 1A ; C999 C000\*R ; C999 C157 ; C999 C259**

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